

CORNELL NOTE-TAKING: EFFECTIVE WAY TO ACTIVATE STUDENTS' AUTONOMOUS LEARNING

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ABSTRACT

Memory is fragile, as it is easy to be forgotten. People who take notes typically retain more information which has a positive effect on learning (Titsworth in Borr et al., 2012). Note-taking acts as a tool to provide students for identifying and understanding the most important aspects of what they are learning (Borr et al., 2012). Cornell note-taking was selected as a short condensation of a source material that is generated by writing them down while simultaneously listening, studying, or observing. It has some sections which it can be filled with the questions or keywords, elaboration, and summary. This study was conducted for hospitality students in International Business and Tourism Institute, in particular Diploma III Hotel Operation when they were learning about Business English for Hotel and Tourism. The result could be seen that note-taking students got higher score and could easily recall information both in written and spoken test.

Key words : writing, note-taking, Cornell note-taking method

INTRODUCTION

Every student has their best way to learn. Some of them are visual learners, auditory learners, and the rest are kinesthetic learners. The aforementioned types of learning usually known as VAK learning styles (Visual, Auditory, and Kinesthetic/Tactile). It is based on modalities - channels by which human expression can take place and is composed of a combination of perception and memory.

Auditory learners may move their lips and read out loud. They may have difficulty with reading and writing

tasks. They often do better talking to a colleague or a tape recorder and hearing what was said. **Visual** learners have two sub-channels linguistic and spatial. Learners who are visual-linguistic like to learn through written language, such as reading and writing tasks. They remember what has been written down, even if they do not read it more than once. They like to write down directions and pay better attention to lectures if they watch them.

Kinesthetic learners will likely learn at their best while touching and moving. It also has two sub-channels: kinesthetic

(movement) and tactile (touch). They tend to lose concentration if there is little or no external stimulation or movement. When listening to lectures they may want to take notes for the sake of moving their hands. When reading, they like to scan the material first, and then focus in on the details (get the big picture first). They typically use color high lighters and take notes by drawing pictures, diagrams, or doodling.

According to the VAK theorists, there is no best learning style at the students' stages. They need to present information using all three styles, or a combination of two or three learning styles. This learning style is used to determine the students' dominant learning style. This allows all students the opportunity to become involved, no matter what their preferred style may be. Note taking is a complex activity that requires comprehension and selection of information and written production processes (Piolat, et al., 2005). It is a combination of those three learning styles. Kiewra in Dezure believed that students who take notes score higher on both immediate and delayed tests of

recall and synthesis than students who do not take notes (Kiewra et al., 1991).

Information delivered by the teacher can be conveyed in various media such as lecturing, and visual aids. Though it is delivered in different ways, the act of writing notes creates a further learning opportunity. There are a number of benefits it could be withdrawn from note-taking, as outlined below.

- a. Prevent the students from forgetting
Although all students attending a class listen to the same lecture, one student and another have different length of memory. Even not for an hour afterwards, the memory will stay only for minutes. Forgetting occurs very rapidly after listening to a lecture, or reading over informational material even if the material is engaging and interesting. So in other words, taking note might help to prevent the students from forgetting.
- b. Exercise and encourage the students' concentration
Being active when attending class does not mean always be active in talking and proposing some ideas.

Taking notes requires the students to be mentally active during a lecture or while reading. One student has to pay attention, interact with information, make decisions about what to record, and write. The students' minds are occupied with demanding tasks which results to less opportunity for the mind to wander. The students' actively focus on the lecturing and the materials given which later they need to make the information being conveyed become more simple and easy to understand.

c. Easily recall the information

Effective notes help students make connections to information that they already know. Note-taking supports information processing and serves as a means of external storage for later review (Piolat et al., in Hadwin, et al., 1999) Note-taking is useful because it provides a written record for review, which in turn promotes recall. Hartley in Hadwin (1999) stated that this benefit is not surprising because most students believe that writing the information will help them to remember and

recall the information easily (Hadwin, et al., 1999).

d. Review the materials/concept during lecturing better

When the students can recall the information easily, they will review the materials successfully. Notes can serve as a permanent record of the information from the lecture, and complete notes are best for students to use in review (Boyle in Borr, et al., 2012). The product of note-taking or the review is important for long-term use, and may participate well to the learning effect.

e. Help the students to do testable materials

After the afore-mentioned benefits go well, the test both in written or spoken will be better examined. One form of the evaluation is the test which is conducted at the end of the unit or semester (term). Effective notes will end up with a good memory when the students do the tests. Teachers generally expect students to remember and apply facts and ideas presented in lecture, in texts or oral test. Tests are based on key ideas teachers emphasize in

their lectures and/or written material that supports key concepts or themes. In a nutshell, taking note might be one of the solutions to do the testable concept/material.

Good note-taking practices can lead to efficient study practices, better course outcomes, and improved retention of content beyond a course's conclusion. Notes can be defined as short condensations of a source material that are generated by writing them down while simultaneously listening, studying, or observing. Taking note is not as simple as some people might think. The students' minds have to work extra to listen, understand, and jot the information down into written form. Piolat, et al. (2005), argued that note taking is often realized under severe time pressure. To take notes quickly, it is necessary to shorten and reduce information. It is impossible to jot all the information down conveyed during lecturing, so only those which become the key points and the elaborations need written.

Friedman pointed out that many mental processes occur simultaneously during the act of note-taking. The

students do not only have to pay attention to the instructor and understand the material, but also identify what is important to be written down in their notes, and coordinate the physical writing or typing of their notes as well. What makes taking note complicated is the students should be able to remember the key points and elaborate into more details while they are listening to their teacher at once. Fact shows that people typically speak at a faster rate than which they are capable of writing or typing. As a result, it is extremely difficult to remember what the lecturing is about and write the associated information down before the teacher moves on to the next topic. (Piolat et al., 2005).

It is difficult to identify good criteria of high-quality notes (Piolat et al., 2005) since notes, commonly, are private and meaningful only for their note-taker. Moreover, Friedman argued that note quality cannot be assessed by anyone other than the note-taker itself, as a specific note format ideal for one person may not be the best quality or way to convey content to someone else. Different students will have different

style of taking notes, in some situation there will be time where a student cannot understand and get the meaning of other student's notes, especially the connection between the key points and their elaboration. For example, single words in notes that appear to be nonsensical to others may cue the note-taker to think about a personal experience and how it relates to the topic of the notes. Also, there are some abbreviations or signs that only the note-taker understands. To support this point, Kiewra and colleagues found that reviewing self-produced notes lead to better recall performance than reviewing another student's notes

Cornell note-taking method is proposed by Walter Pauk, an education professor at Cornell University, New York. He introduced its effective use in his bestselling book "How to Study in College". The Cornell note-taking method uses a number of sections, listed as follows.

- Upper column

The students may fill this column with several options; 1) their names, 2) the heading (title of the topic at that day), or 3) date the notes taken.

This column is not as essential as the next column to be explained but the content is sufficient to describe whose notes is, the big topic or materials the students learn at the specific day as well as the date.

- Right column (notes column)

As proposed by Pauk, the right column is used to capture the teacher's ideas and facts with students taking notes during the lecture in this column. It takes two thirds of the page. There are a number of advised points can be filled here; 1) testable materials, 2) important ideas, 3) definitions, and 4) supporting details. Further, to make it neat, support every point with bullet or symbols and skip the lines as well to understand and catch the point easily.

- Left column (cue column)

It takes one third of the page. The left column (the cue column) is reserved for keywords and questions relevant to the notes on the right. After filling the right column, the students review their notes and write questions in the cue column to highlight main points, meanings,

and relationships. The process of writing the questions in the cue column can help clarify meanings, reveal relationships, establish continuity, and strengthen memory. This column is also used in the review process when notes are studied after the class or before the test.

- Bottom column (summary)

The last column is left for summarizing the main points of the

page, which again clarifies meanings and also makes review easier. This space needs only several sentences to make the concept simple.

When the note column, cue column and summary area are used for note-taking and for review, students have an organized system that can improve comprehension and achievement (Borr, et.al, 2012).

UPPER COLUMN (name, topic, or date)	
CUE COLUMN <ul style="list-style-type: none"> • write the key points or questions related to the notes column on the right 	NOTES COLUMN <ul style="list-style-type: none"> • write testable materials, important ideas, definitions, and supporting details • use symbols or bullet to make it well-organized
SUMMARY COLUMN <ul style="list-style-type: none"> • Summarize the information in brief 	

Fig. 1 : Format of Cornell Note-Taking System

Cornell note-taking is not the only note taking system; there are other systems share their benefits. No single system suits all students. However, many successful students, especially college students, and business people have found that the Cornell note taking

system is very effective for lectures or reading. It is organized around clearly defined topics, subtopics, and supporting details. Taking a note is not merely writing the information during the lecturing. Since Cornell System is both a note taking and a study system

but it needs a complex skill which integrated each other. There are six steps to do Cornell note-taking; the details can be seen below.

a. Record

Before doing the recording, pen and paper should be prepared in advanced. This is what the students need to do in the right column; 1) record 2) paraphrase, 3) elaborate, and 4) write in speedy. It is not that easy to write in speedy since the students have to listen and understand the lecture first before delivering the ideas into written form. One thing to help is inserting abbreviations or symbols to make your writing quick, but note that they must be understandable. Abbreviations or symbols used by one student and other students might be different. It does not give any guarantee that one student may understand the meaning of other students' symbols or abbreviations. Last, write legibly so the notes make sense to read or review later.

b. Question

Questions are placed on the cue column on left side of the paper.

After filling the right column, the students need to formulate test questions based on the information recorded in notes. The questions should focus on specific details and the main ideas.

c. Recite

When the students finish explaining the information in the notes in their own words, they successfully do recitation. Some benefits taken from recitations are:

- It improves the learning process since reciting aloud is a powerful technique for anchoring information in the long-term memory.
- It ensures the students' understanding toward the notes they make.
- It helps the students to retrieve the information from their memory. Studies show that students who recite tend to do better on tests than students who just read their notes silently to themselves.

d. Reflect

One effective way to reflect the information is by making some

connections with the students' own experiences, observations and with other facts and ideas discussed in class. Besides, the students may ask questions such as "What do I agree with? What do I disagree with? Which part is confusing? Which part is the easiest one to understand? Is there any new question pop up?"

e. Recapitulate (summarize)

The summary is located at the bottom of the paper (summary column). Make the summary simple in the students' own words; the one who really understands the note they make is the note taker. This is the best test of how well they understand the concept.

f. Review

Review nightly or several times after makes your notes effective. Review does not mean the students only re-read the notes they make before, but it functions to recall the information after resting the notes a couples of hours or day afterwards.

Doing frequent review is recommended than just spend the night a day before the test cramming the materials.

METHODOLOGY

This research was conducted in International Business and Tourism Institute (formerly was International Bali Tourism Institute (STPBI). As one of the well-known school for tourism, IPBI has its students to deal with tourism and hospitality as an industry that they will work in later. The students do not only learn about the subjects in specific industry, but also learn English as the language to facilitate their communication with the customers (guests). English is learnt every semester to keep and increase their ability in communicating both in spoken and written form and adjusted with the program they take in that semester. This research was done in Diploma III Hotel Operation class when the students were learning about Business English for Hotel and Tourism. There are seven units (chapters) they need to learn to obtain the objectives in one semester. This research was taken when they

students were learning about *Business Presentation* (unit 3). The students were already accustomed with Cornell note-taking method since this method was introduced in the previous semester and re-explained in the beginning of the semester. Therefore, the teacher has ensured that the students were already familiar with this kind of method. Previously, the students were explained and got accustomed with Cornell note-taking method, so their format of note-taking were same one another. Procedures taken are explained as follows.

- a. the teacher selected 1 unit(chapter) of the guide book
- b. the unit was explained in a series of meeting (1-3 meetings)
- c. the teacher did not ask the students to take note on purpose, but let the students did by themselves (self-produced note-taking)
- d. the students did not know and realize that they were on the research and being analyzed. Some students were noticed

that they transformed the information (lecturing) into written form (Cornell note-taking), but the rest did not do anything just kept listening while the teacher were explaining.

- e. it was extra job for the teacher; not only explaining, but the teacher also needs to notice which students did note-taking and did not.
- f. while explaining, the teacher also checked up the students' note taking without being known by the students that their note-taking were analyzed.
- g. there was a test both written and spoken when the specific unit has been finished. Before the test begun, the teacher already knew and noticed the students who made note-taking.

The data were collected through a series of method, namely:

- a. Written test. The test was in the forms of multiple choice,

true false question, and essay question. The test was done after all the materials in that unit has been finished to explain. The test was done individually to assess individual's learning result.

- b. Oral test. The oral test was conducted to complete the result of the written test. It used to dig more information the students noted previously beside being tested with written one.
- c. Interview. Not all of the students were interviewed, just took three students from note-takers, and three more students from non note-takers as the sampling. They were interviewed individually with the objective to identify how their learning process through this method, the excellence and the limitations as well.
- d. Questionnaire. Sometimes, the students feel reluctant to share their feeling or experiences to do note taking when they were being

interviewed. Questionnaire acted as a bowl to accommodate the students' thought or point of views on this method.

FINDINGS AND DISCUSSION

Based on the data, there were a number of findings found in this research, listed as follows.

- a. Note-taking students recalled the information easily (oral test)
When the students were being tested orally, the note-taking students spent shorter time of pause to answer. They only spent several minutes to think and after that they successfully recalled the information.
- b. Note-taking students got higher score on written test
The test showed that note-taking students' score were higher than the non note-taking students. Although they did not get the perfect score, but the highest score was from one of them.
- c. Note-taking students could elaborate the key point better than the non note-taking students in essay (written test)

They could paraphrase the main point of their answer better. They delivered the answer (essay) in more sentences than what the non note-taking students had. They were able to convey the meaning of the answer better. Most of non note-taking students wrote only a number of sentences (less than what the note-taking students had) although their answer were correct. In other words, the non note-taking students' answers were short and clear.

- d. Note-taking students spent more effective time to learn a day before the test than the non note-taking students

It was more effective since they only needed to check their notes without reading the whole materials in that unit/chapter. However, sometimes they also read the guide book only for looking for some explanations. Therefore, they could save the time better.

- e. Non note-taking students spent longer time to recall the information (oral test)
When the questions were delivered orally, most of the non note-taking

students needed time to recall the information. They spent a couple of minutes to think and pause to memorize what the teacher explained. Meanwhile, the note-taking students spent not as long as they previous students. They spent shorter time, or even directly answered the questions.

CONCLUSION AND SUGGESTIONS

The findings showed that a) note-taking students recalled the information easily (oral test), b) note-taking students got higher score on written test, c) note-taking students could elaborate the key point better than the non note-taking students in essay (written test), d) note-taking students spent more effective time to learn a day before the test than the non note-taking students, and e) non note-taking students spent longer time to recall the information (oral test). In a nutshell, note-taking students got higher score and could easily recall information both in written and spoken test which indicated that Cornell Note Taking was

effective to activate autonomous students' learning.

Based on the findings, the researcher suggests some

recommendation on the use of Cornell note-taking method for the teacher and the students as well.

For teachers	For students
<ul style="list-style-type: none"> The teacher needs to take time to explain in the very beginning of the term about this note-taking. Provide the rationale and support with the reasons from educational research. 	<ul style="list-style-type: none"> Do not transcribe every single word the teacher says. Make it simple by using the students' own words as to understand it easily.
<ul style="list-style-type: none"> Make the students familiar with the topic before starting to explain the main concept. It can be done by providing examples that are easy to find around, or by doing brainstorming. If the students are already familiar with the materials, it will ease them to understand and do the note-taking. 	<ul style="list-style-type: none"> After taking notes, the students should review the notes on the same day they created them. It should be done on a regular basis, to avoid cramming the notes into only one night quick session of study before the exam/test.
<ul style="list-style-type: none"> Do not give the students so many complicated materials at once. Not only difficult to understand, but also hard to select the important points to be jotted down on the notes. 	<ul style="list-style-type: none"> Choices of media to take notes is also taken into consideration; whether on pen and paper or with a laptop. There are either some excellences and limitations of using both of them.
<ul style="list-style-type: none"> Avoid to give them so many hand-outs. The students will have poor study behaviors such as relying on the materials instead of attending class and taking notes. 	<ul style="list-style-type: none"> Testing themselves informs them what they do not know yet from their notes and successful recall of tested information improves their ability to recall that information later. Find any questions or things that they are still in doubt.
<ul style="list-style-type: none"> Encourage students to take notes in their own words rather than record every word the teacher say in class. Doing so will lead to deeper understanding during lecture, more student engagement in class, and better retention of course content. 	

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